Global Monetary Order

Barry Eichengreen
University of California, Berkeley

Order or Disorder?

- We see elements of order, defined as "an arrangement of items in relation to one another according to a particular sequence, pattern or method."
  - In the exchange rate arrangements operated by different countries, which are not entirely without logic.
  - In policies toward international capital flows, which include, in different countries, restrictions on transactions on capital account, adjustments in macroeconomic policies and the adoption of macroprudential measures.
  - In the provision of international liquidity, denominated mainly in a handful of leading national currencies that are traded in deep and liquid markets and used internationally.
  - In how oversight of exchange rates, capital flows and international liquidity is provided through the International Monetary Fund, but also through other groupings of countries.
- But we also see elements of disorder, defined as "a confused or messy state."

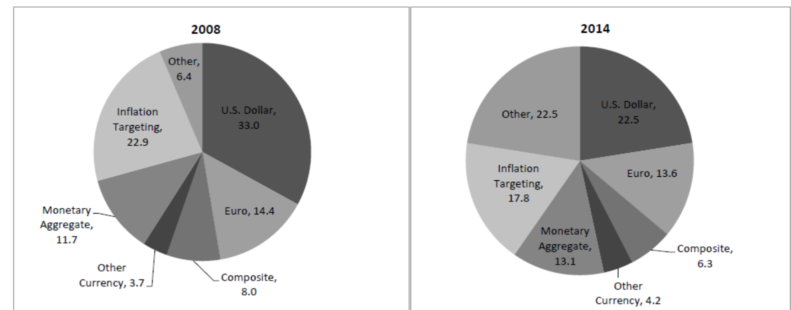
I take these four aspects one at a time:

- Exchange rates
- Capital flows
- International liquidity
- The global safety net
  - In this short presentation I will focus mainly on the last two.

We continue to see a variety of monetary policy frameworks

- Surprisingly, there has been no decline in the share of countries that practice monetary-aggregate targeting.
- Also surprisingly, there has been no increase in the share of countries engaged in inflation targeting, which is again surprising given the fashion for the latter and the fact that countries adopting inflation targets rarely if ever abandon them.
- The growing share of monetary frameworks has been almost entirely concentrated in “other” arrangements in which countries either do not specify their framework or else formulate policy with reference to an eclectic mix of indicators. Evidently, opaque and eclectic approaches continue to have a place in the global monetary order.

FIGURE 2. MONETARY POLICY FRAMEWORKS AND EXCHANGE RATE ANCHORS, 2008-2014 (PERCENT OF IMF MEMBERS AS OF APRIL 30)



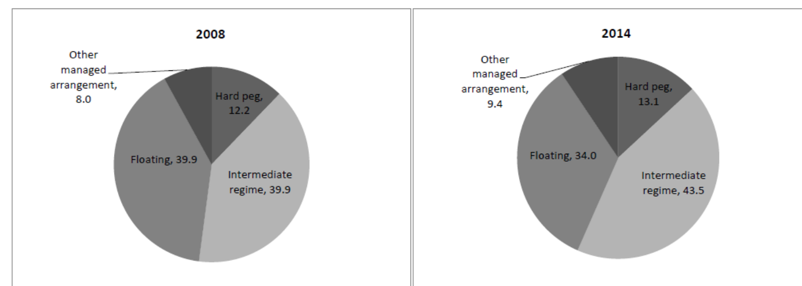
Note: Figures cover 188 member countries and 3 territories: Aruba and Curaçao and Saint Maarten (all in the Kingdom of the Netherlands) and Hong Kong SAR (China). “Other” includes countries that have no explicitly stated nominal anchor but instead monitor various indicators in conducting monetary policy. Also used in a few cases when no relevant information on the country is available.

Source: IMF AREAER database.

And similarly exchange rate arrangements

- The share operating hard pegs has risen due entirely to countries with no separate legal tender.
- There has also been a rise in the share of countries operating intermediate regimes, due almost entirely to increases in crawling pegs.
- Academic advocacy of floating notwithstanding, the prerequisites for successful maintenance of a freely floating exchange rate are daunting, since they include deep and liquid financial markets, supervision and regulation capable of limiting currency mismatches, a clear and credible policy framework that does not revolve around the exchange rate, and substantial economic size.
- A global monetary order based on free floating, it follows, is no more realistic than a return to a Bretton Woods-style global system of hard pegs.

FIGURE 3. EXCHANGE RATE ARRANGEMENTS, 2008–14 (PERCENT OF IMF MEMBERS AS OF APRIL 30)



Note: Figures cover 188 member countries and 3 territories: Aruba and Curaçao and Saint Maarten (all in the Kingdom of the Netherlands) and HongKong SAR (China). 2008 data as retroactively classified February 2, 2009; does not include Kosovo, Tuvalu, and South Sudan, which became IMF members on June 29, 2009, June 24, 2010, and April 18, 2012, respectively.

Source: AREAER database.

We see this in de facto behavior as well

- I have long been committed to the view that we are moving toward an eclectic, multipolar monetary and financial system.
- There is some evidence of that in Frankel-Wei regressions, what with the € being the dominant reference currency mainly in Europe, the RMB mainly in Asia, and the $ in a variety of regions.

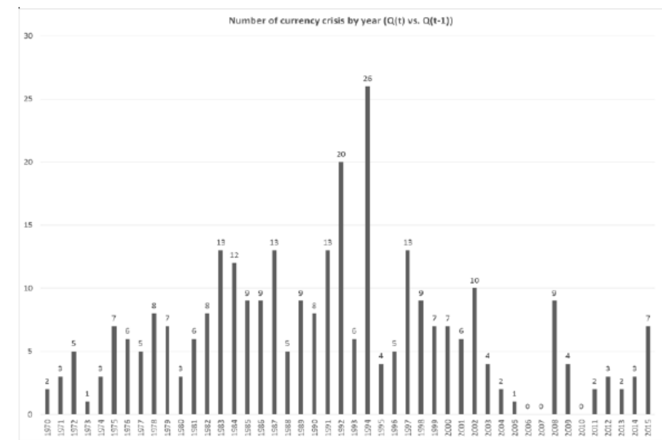
Dominant Reference Currency by Region, 2013-16

	RMB	USD	EURO
ASIA	5	6	1
EUROPE	1	2	9
MIDDLE EAST AND AFRICA	1	3	2
NORTH AMERICA	1	1	0
SOUTH AMERICA	3	5	0
TOTAL	11	17	12

It can be argued that these changes have "attenuated" the currency crisis problem

- Defined here as instances where the exchange rate depreciates by at least 20 per cent between successive quarters and does not recover 5 per cent or more of that depreciation in the subsequent quarter.
- Although Fig 4 is a bit of a Rorshacht test.

FIGURE 4. NUMBER OF CURRENCY CRISES BY YEAR



Source: See text.

More generally we can tabulate crisis incidence by regime

- For EMs, the data suggest that intermediate regimes are especially crisis prone.
- Result basically carries over to all (181) IMF members, though hard pegs emerge here in a less favorable light.
- Thus, there is a tension between the relatively high frequency of stability problems in countries with intermediate regimes and their continued revealed preference for such arrangements.

TABLE 4. CRISIS FREQUENCY 1980-2015 (IN PERCENT)

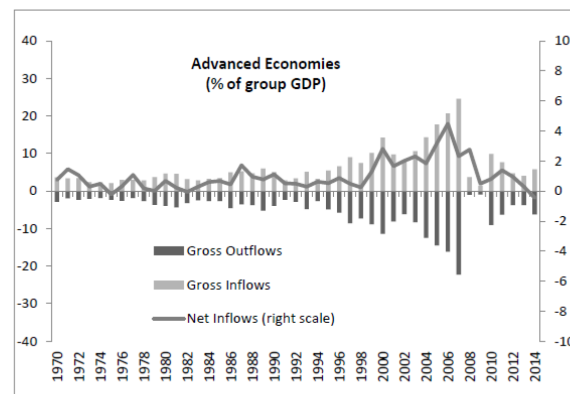
	Banking	Currency	Sovereign	Growth
51 Emerging Markets				
Hard pegs	3.10	0.78	1.55	6.98
Intermediate	4.10	6.03	2.24	3.79
Peg to single currency	2.98	7.28	3.31	5.30
Basket peg	5.15	3.09	1.03	7.22
Horizontal band	7.04	7.04	2.82	2.82
Crawling peg/band	6.89	7.49	2.69	3.59
Managed float	2.24	4.69	1.43	2.45
Independent float	1.12	5.59	0.56	3.91
181 IMF Members				
Hard pegs	2.57	1.21	1.37	5.15
Intermediate	2.32	4.90	1.26	3.33
Peg to single currency	1.08	4.98	1.08	4.26
Basket peg	2.21	4.43	1.85	4.61
Horizontal band	2.76	2.76	1.03	1.03
Crawling peg/band	5.64	6.55	1.52	3.20
Managed float	1.85	4.64	1.10	2.28
Independent float	2.12	3.92	0.33	3.43

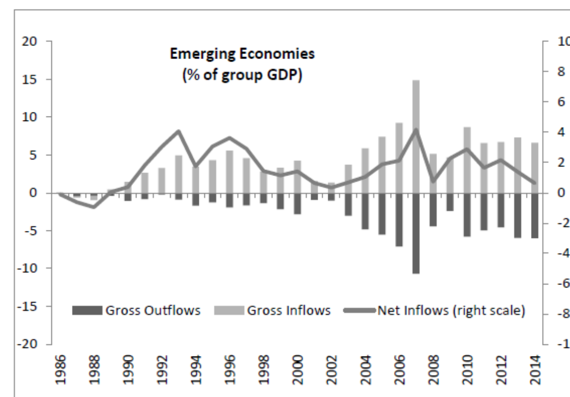
Source: See text.

The paper then provides a fairly extensive analysis of capital flows

- Which time doesn't permit me to recount in detail here.
- Other than to say that capital flow volatility remains a problem.
- It is no longer just an emerging-market problem, if it ever was: the volatility of gross flows has been rising faster for advanced countries than for emerging markets.
- Table 3 (not shown here) also confirms that equity flows are less volatile than debt.

FIGURE 5. THE EVOLUTION OF TOTAL GROSS AND NET CAPITAL FLOWS: ADVANCED AND EMERGING ECONOMIES





Source: IMF Balance of Payments Statistics

The not-well-understood corporate debt problem

- Perhaps emerging markets have made more progress strengthening government budgets than strengthening corporate governance, allowing corporate borrowers to systematically undervalue the risks of foreign currency borrowing (Caballero and Krishnamurthy 2003).
- It could be that international investors underestimate the risk of default by corporations with foreign-currency debts when the borrower's currency depreciates (Delikouras, Dittmar and Li 2012).
- It could be that nonfinancial corporations in emerging markets are arbitraging regulations constraining the activities of financial institutions, borrowing abroad where interest rates are low and investing in higher yielding domestic assets like bank deposits (Caballero, Panizza and Powell 2015).
- Closest thing to a synthesis is that emerging market corporates have been lured to borrow in foreign currency by unprecedentedly low interest rates in countries engaged in quantitative easing (Chui, Kuruc and Turner 2016); they are prepared to incur those foreign currency exposures, and foreign creditors are willing to extend them, because emerging-market countries have accumulated massive foreign currency reserves which they will use to pay off these debts in extremis.

In any case, the sudden stops associated with these flows remain a problem

- Defined here as when portfolio and other inflows by nonresidents decline below the average in the previous 20 quarters by at least one standard deviation, when that decline lasts for more than one quarter, and when flows are two standard deviations below their prior average in at least in one quarter.
  - The episode then ends when capital flows recover to within one standard deviation of their prior mean.
- Sample at right is for all emerging markets for which there are reliable quarter capital-flow data.

TABLE 5. SUDDEN STOPS, 1990-2002 VS. 2003-2015

	1991-2002	2003-2015
Number of sudden stops	16	30
As percent of available observations (stops/total observations)	1.8 % (16/903)	2.1 % (30/1354)
Quarters for which the sudden stops last	4.0	3.6
Capital flows during sudden stops (% of GDP), first quarter	-1.6	-1.3
Capital flows during sudden stops (% of GDP), average for first four quarters	-1.8	-1.7
Capital flows in the four quarters preceding sudden stops (% of GDP)	1.3	2.0*
Capital flow turnaround: Avg. capital flows during four quarters of sudden stops - Avg. capital flows in the four preceding quarters	-3.1	-3.5*
Capital flow turnaround: Avg. capital flows during all quarters of sudden stops - Avg. capital flows in the four preceding quarters	-2.3	3.2**
Decline in GDP during sudden stop: 4 quarters year on year	3.8	2.3

*, **, and *** indicate that the value is significantly different than that in the preceding column at the 10, 5 or 1 percent level.

In any case, the sudden stops associated with these flows remain a problem

- Incidence is largely unchanged between periods.
- Output drop is similarly the same.
- A variety of indicators point to stronger policies (larger reserves) and more policy space (less need for draconian fiscal consolidation in the second period).
- That this hasn't attenuated the output costs is troubling.

TABLE 5. SUDDEN STOPS, 1990-2002 VS. 2003-2015

	1991-2002	2003-2015
Number of sudden stops	16	30
As percent of available observations (stops/total observations)	1.8 % (16/903)	2.1 % (30/1354)
Quarters for which the sudden stops last	4.0	3.6
Capital flows during sudden stops (% of GDP), first quarter	-1.6	-1.3
Capital flows during sudden stops (% of GDP), average for first four quarters	-1.8	-1.7
Capital flows in the four quarters preceding sudden stops (% of GDP)	1.3	2.0*
Capital flow turnaround: Avg. capital flows during four quarters of sudden stops - Avg. capital flows in the four preceding quarters	-3.1	-3.5*
Capital flow turnaround: Avg. capital flows during all quarters of sudden stops - Avg. capital flows in the four preceding quarters	-2.3	3.2**
Decline in GDP during sudden stop: 4 quarters year on year	3.8	2.3

*, **, and *** indicate that the value is significantly different than that in the preceding column at the 10, 5 or 1 percent level.

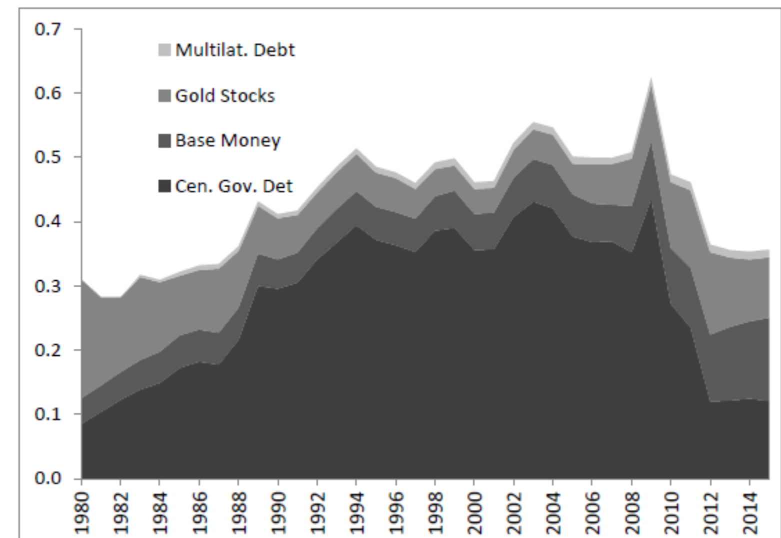
The international liquidity problem

- Defined as resources widely accepted internationally in settlement of international transactions.
  - Held as reserves.
  - Provide pricing benchmarks.
  - Regarded as reliable stores of value
  - Accepted as collateral in financial transactions.
  - Satisfy prudential requirements.
  - Provide grease for the wheels of 21st century globalization.
    - Thus, one potential explanation for the slowdown in trade and cross-border capital flows is a shortage of international liquidity.

The international liquidity problem

- Figure 8 shows the evolution of international liquidity defined as the high-powered money stock of OECD countries, the "safe" (AAA and AA rated) central government bonds of OECD countries, the bonds of supranationals, and gold in official and private hands, scaled by global GDP.
  - SDRs are excluded.
  - Private sector liabilities (corporate bonds) are excluded.
- Pattern is striking.
  - Recent decline reflects rating downgrades and inelasticity of other sources of supply.
  - Evidently, there is a problem (to which I will return).

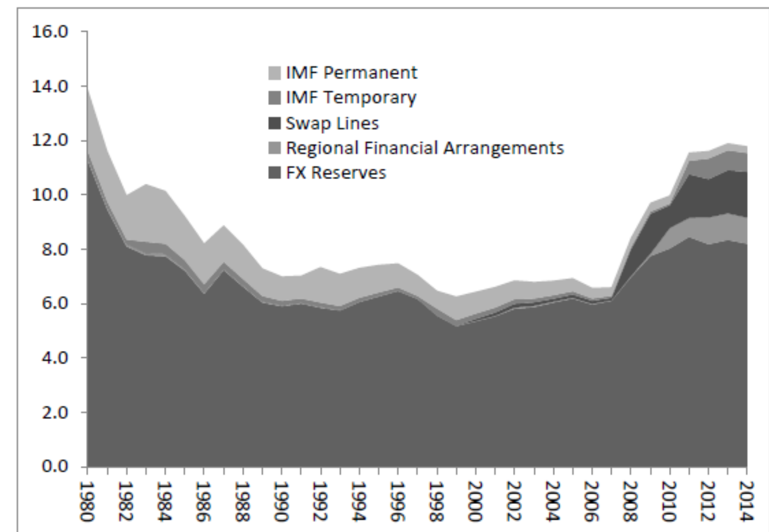
FIGURE 8. INTERNATIONAL LIQUIDITY AS A SHARE OF GLOBAL GDP, 1980-2015



Global financial safety net

- Some progress in building it up since the GFC.
- Although that growth has now plateaued.
- And multilateral and regional efforts notwithstanding, reserves held at the national level still account for the largest part.

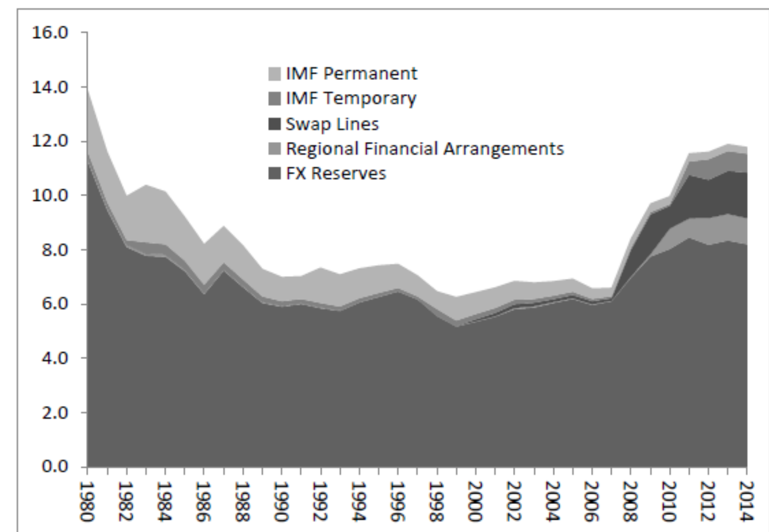
FIGURE 9. GLOBAL FINANCIAL SAFETY NET AS PERCENTAGE OF EXTERNAL LIABILITIES



And may be less than meets the eye

- Countries are reluctant to use reserves or allow them to fall below "prudent" levels.
- Problem of IMF stigma remains.
- There also appears to be reluctance to draw on bilateral swaps and regional financial arrangements.
- Fed $ swaps an exception – the interesting question being why.
  - A conjecture is that they are extended by an apolitical entity, namely an independent central bank, and therefore do not come lumbered with political conditions and obligations, either explicit or implicit, whereas the IMF and CMIM are directly answerable to and perceived as carrying out the bidding of governments.

FIGURE 9. GLOBAL FINANCIAL SAFETY NET AS PERCENTAGE OF EXTERNAL LIABILITIES

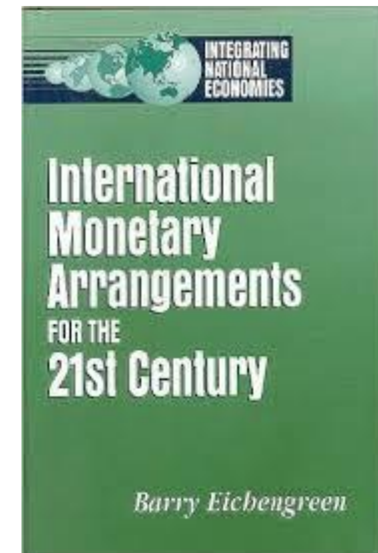


Avenues to reform

- Radical vs. incremental?
- There is no shortage of radical proposals (for inter alia a single world currency, a global central bank), but I rule these out as politically infeasible (although we can certainly discuss this).
- So what, then, are the elements of an incremental approach to reform?

- First, use policy incentives to address the volatility of capital flows by attempting to shift their composition from short to long and from debt to equity.
  - Reforms of tax codes at the national level to make debt less attractive.
  - Changes in prudential regulation to make debt and short-term obligations more costly.
  - Strengthen corporate governance and put in place insolvency regimes to address emerging corporate debt problems.

- Second, continue to rationalize exchange rate regimes by moving away from the unstable middle.
  - For most countries this means freer floating, Europe having pointed up the formidable preconditions for a workable monetary union.
  - But floating is not a monetary regime: it is the absence of a monetary regime.
  - Floating backed by inflation targeting is probably still the least worst option.
  - Among its other advantages is a higher degree of exchange rate stability than other floats.



- Third, address global liquidity needs.
  - In the short run this will have to be addressed by steps at the national level (by Europe and China getting their acts together).
  - Experiment will limited allocation of SDRs directly to central banks up to a modest ceiling to set a precedent.
  - Similarly, experiment with limited authorization for IMF to borrow on capital markets to fund liquidity provision.
  - Alternatively, allow the IMF to experiment with pooling super-AAA and other sovereign bonds to create a “mezzanine tranche” of international liquidity.

- Fourth, enhance the global safety net.
  - Authorize the IMF to unilaterally prequalify groups of countries for the FCL and PLL.
  - Address the problem of IMF stigma by insulating/distancing Fund decision making from national politics.
    - If the reason why Fed swaps are seen by the recipients as more attractive and effective than IMF lending is that they are provided by an independent agency that does not attach political conditions, either explicitly or implicitly, to its assistance, then strengthening the control of national governments over the Fund's day-to-day operations may be a mixed blessing. An alternative is to give the IMF's managing directors more independence, like that possessed by the members of the Federal Open Market Committee who are responsible for authorizing the extension of Federal Reserve swap lines.

- Thank you very much.